

## INSTRUCTIONS FOR PRINTING AND ASSEMBLING PAMPHLETS

This "Community Health Status Report" is designed to be assembled as a pamphlet, with each page occupying half of an 8.5 x 11 sheet. Follow these instructions to create a pamphlet:

If your printer provides double-sided printing:

- In Print Properties, specify double-sided printing. This is sometimes called "duplex" printing.
- One option under double-sided printing should be whether to flip along the short or long edge of the paper. Choose to flip on the short edge. This may also be referred to as "tablet" printing, or "bind at top". Start printing from page 3. This will prevent these instructions from becoming part of your booklet.
- After printing, fold the document along the middle (short end to short end), so that the title page is on top. Staple along the crease. (This may be difficult without a long stapler.)

If your printer DOES NOT provide double-sided printing, you will need a copier that makes 1-to-2 sided copies

- Print the document on 8.5 x 11 sheets. Make sure the print orientation is landscape. Start printing from page 3. This will prevent these instructions from becoming part of your booklet.
- Once the document is printed, turn every second page upside down. For example, each Status Report prints on eight sheets. Turn sheets 2, 4, 6, and 8 upside down. NOTE: Upside down means that the text is inverted, NOT that the page is flipped over. All the text should still be facing you.
- Set your photocopier to make 1-to-2 sided copies. Copy the document.
- After copying, fold the document along the middle (short end to short end), so that the title page is on top. Staple along the crease. (This may be difficult without a long stapler.)

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PROVIDED TO YOU COURTESY OF:

COMMUNITY HEALTH STATUS REPORT

# Gratiot County Michigan

2009

For more information, please contact your State or local health department or the project partners, or visit the Community Health Status Indicators Project web site at:

[communityhealth.hhs.gov](http://communityhealth.hhs.gov)



**ASTHO**  
Association of State and Territorial Health  
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**NALBOH**  
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*Our Mission: Provide Information for Improving Community Health*

*Brought to you by a partnership of Federal agencies and not-for-profit organizations that are identified at the end of the pamphlet. Comments and questions can be sent to [comments@hrsa.gov](mailto:comments@hrsa.gov).*

*Please refer to the CHSI [Data Sources](#), [Definitions](#), and [Notes](#) for all sources, methods, and calculations (available on website).*

[communityhealth.hhs.gov](http://communityhealth.hhs.gov)

## PUBLIC HEALTH IN AMERICA

### VISION

Healthy People in Healthy Communities

### MISSION

Promote Physical and Mental Health and Prevent Disease, Injury, and Disability

## PUBLIC HEALTH

- Prevents epidemics and spread of disease
- Protects against environmental hazards
- Prevents injuries
- Promotes and encourages healthy behaviors
- Responds to disasters and assists communities in recovery
- Assures the quality and accessibility of health services

## ESSENTIAL PUBLIC HEALTH SERVICES

- Monitor health status to identify community health problems
- Diagnose and investigate health problems and health hazards in the community
- Inform, educate, and empower people about health issues
- Mobilize community partnerships to identify and solve health problems
- Develop policies and plans that support individual and community health efforts
- Enforce laws and regulations that protect health and ensure safety
- Link people to needed personal health services and assure the provision of health care when otherwise unavailable
- Assure a competent public health and personal health care workforce
- Evaluate effectiveness, accessibility, and quality of personal and population-based health services
- Research for new insights and innovative solutions to health problems

Source: Public Health Functions Steering Committee, Fall 1994.

## CONFIDENCE INTERVALS

### SUMMARY MEASURES OF HEALTH [page 4](#)

	Value	Confidence Interval
ALL CAUSES OF DEATH	902.7	(864.5 - 940.8)
SELF-RATED HEALTH STATUS	16.2%	(9.9 - 22.6%)
AVERAGE NUMBER OF UNHEALTHY DAYS IN PAST MONTH	7.0	(4.8 - 9.3)

### ADULT PREVENTIVE SERVICES USE (%) [page 10](#)

	Value	Confidence Interval
Pap Smears (18+)	nrf	(nrf - nrf)
Mammography (50+)	nrf	(nrf - nrf)
Sigmoidoscopy (50+)	nrf	(nrf - nrf)
Pneumonia vaccine (65+)	nrf	(nrf - nrf)
Flu vaccine (65+)	nrf	(nrf - nrf)

### RISK FACTORS FOR PREMATURE DEATH [page 11](#)

	Value	Confidence Interval
No exercise	20.7%	(14.2 - 27.3%)
Few Fruits/Vegetables	81.5%	(71.7 - 91.3%)
Obesity	28.8%	(20.6 - 36.9%)
High Blood Pressure	23.9%	(13.9 - 33.9%)
Smoker	29.8%	(21.0 - 38.6%)
Diabetes	9.6%	(3.5 - 15.6%)

## FEDERAL PARTNERS



**ATSDR**  
Agency for Toxic Substances and Disease Registry  
[atsdr.cdc.gov](http://atsdr.cdc.gov)



**CDC**  
Center for Disease Control and Prevention  
[www.cdc.gov](http://www.cdc.gov)



**HRSA**  
Health Resources and Services Administration  
[www.hrsa.gov](http://www.hrsa.gov)



**NLM**  
National Library of Medicine  
[www.nlm.nih.gov](http://www.nlm.nih.gov)

## SELECTED TERMS

**Age-Adjusted death rates** allow comparison of rates between communities with different age structures. Rates have been adjusted to the year 2000 standard, the standard recommended for years 1999 and later.

**Expected number of infectious disease cases** has been calculated by applying the rate observed for all the peer counties to the county population.

**Death rates and birth measures** are consistent with U.S. Healthy People 2010 objectives.

**EPA air quality standards** measured and exceeded are reported. Monitoring is conducted in areas believed to be at risk and is not done in every jurisdiction.

**Leading causes of death** are provided for underlying cause of death categories constituting 10% or more of deaths in that race/ethnicity and age group.

**Prevalence rates** indicate the number in a population who have a certain characteristic at any time during the period. The BRFSS survey has been weighted to represent the State's adults.

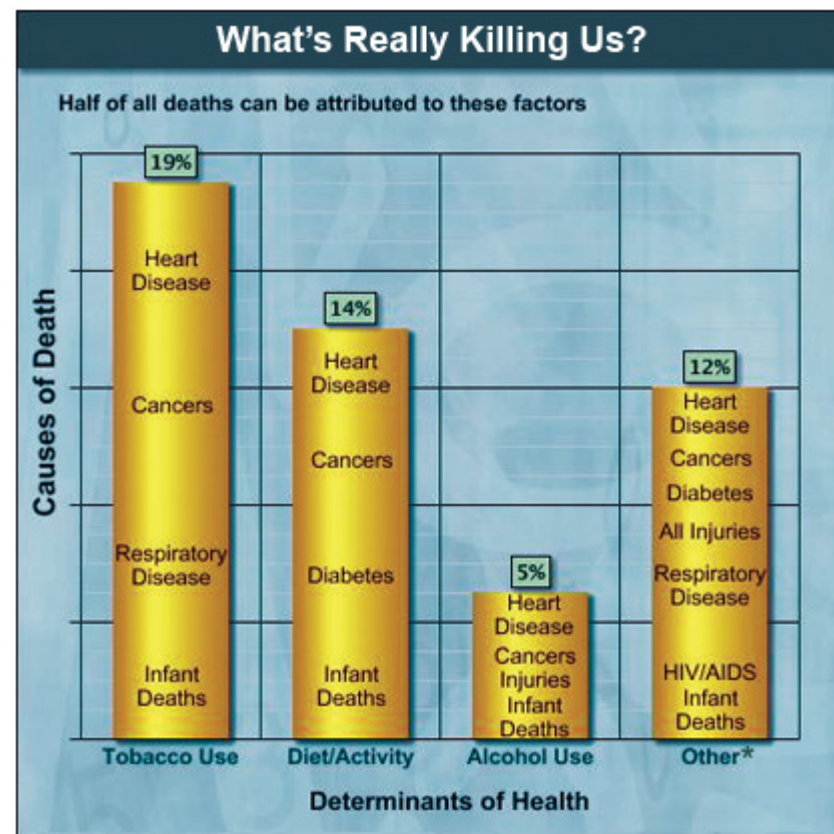
**Persons enrolled in Medicaid or Medicare** are program beneficiaries. The number of persons under age 65 receiving Medicare may represent a measure of disability in children and adults. Persons over age 65 with Medicaid coverage may also represent a population having greater medical needs.

**Relative health importance** determination of unfavorable were rates above the peer or the U.S. rate.

**Vulnerable populations** of the work disabled, those depressed, and recent drug users were estimated. Work disabled used a regression-based county-specific estimate. National age- or race-specific rates of major depression and recent drug use were applied to the county population to obtain the county estimate.

For complete information regarding data definitions and sources, please refer to the Data Sources, Definitions, and Notes available on HRSA's web site at:

[communityhealth.hhs.gov](http://communityhealth.hhs.gov)



\* Other lifestyle and personal behavior (nongenetic) risk factors include microbes, toxins, firearms, sexual behavior, motor vehicles, and drug use. Source: McGinnis, J.M., & Foege, W.H. (1993). Actual causes of death in the United States. JAMA., 270(18), 2207-2212.

*While we may measure deaths due to heart disease, cancers, or infant deaths, we should always keep in mind that factors such as tobacco, diet, activity, and alcohol use substantially contribute to these deaths. For example, as shown in the above graphic, tobacco use accounts for 19 percent of all U.S. deaths.*

## DEMOGRAPHIC INFORMATION

### Gratiot County, MI

Population size <sup>1</sup>	42,245
Population density (people per square mile) <sup>2</sup>	74
Individuals living below poverty level <sup>3</sup>	15.2%
<b>Age distribution<sup>1</sup></b>	
Under Age 19	22.8%
Age 19-64	63.3%
Age 65-84	11.4%
Age 85+	2.4%
<b>Race/Ethnicity<sup>1</sup></b>	
White	92.7%
Black	4.9%
American Indian	0.6%
Asian/Pacific Islander	0.5%
Hispanic origin (non add)	4.6%

### PEER COUNTIES

Peer counties (counties and county-like geographic areas) in stratum number 29 were stratified on the basis of the following factors: frontier status, population size, poverty, age. Below are peer county ranges representing the 10th and 90th percentile of values. This trimmed range of peer county value is used consistently throughout the report.

Population size <sup>1</sup>	27,949 - 58,506
Population density (people per square mile) <sup>2</sup>	39 - 149
Individuals living below poverty level <sup>3</sup>	10.4 - 15.2%
<b>Age distribution<sup>1</sup></b>	
Under Age 19	22.9 - 32.0%
Age 19-64	58.9 - 63.5%
Age 65-84	7.7 - 12.9%
Age 85+	0.9 - 2.1%
<b>Race/Ethnicity<sup>1</sup></b>	
White	79.7 - 97.8%
Black	0.5 - 18.1%
American Indian	0.2 - 1.2%
Asian/Pacific Islander	0.3 - 2.1%
Hispanic origin (non add)	0.9 - 19.6%

nda No data available.

<sup>1</sup> The Census Bureau. Current Population Estimates, 2008.

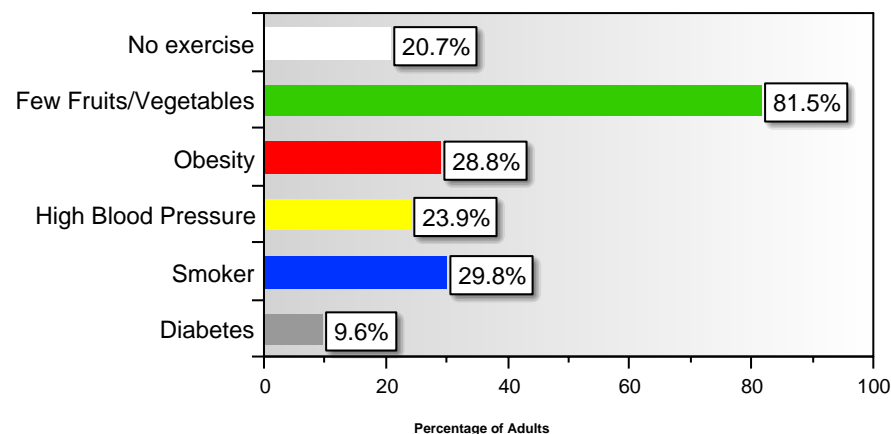
<sup>2</sup> HRSA. Area Resource File, 2008.

<sup>3</sup> The Census Bureau. Small Area Income Poverty Estimates, 2008.

## RISK FACTORS FOR PREMATURE DEATH<sup>1</sup>

### Gratiot County, MI

Communities may wish to obtain information about these measures, collected and monitored at local level.



nrf No report, survey sample size fewer than 50.

<sup>1</sup> CDC. Behavioral Risk Factor Surveillance System, 2000-2006.

## ACCESS TO CARE

### Gratiot County, MI

In addition to use of services, access to care may be characterized by medical care coverage and service availability.

Uninsured individuals (age under 65) <sup>1</sup>	3,600
Medicare beneficiaries <sup>2</sup>	
Elderly (Age 65+)	5,776
Disabled	1,075
Medicaid beneficiaries <sup>2</sup>	7,813
Primary care physicians per 100,000 pop <sup>2</sup>	59.2
Dentists per 100,000 pop <sup>2</sup>	35.5
Community/Migrant Health Centers <sup>3</sup>	Yes
Health Professional Shortage Area <sup>3</sup>	No

nda No data available.

<sup>1</sup> The Census Bureau. Small Area Health Insurance Estimates Program, 2006.

<sup>2</sup> HRSA. Area Resource File, 2008.

<sup>3</sup> HRSA. Geospatial Data Warehouse, 2009.

## PREVENTIVE SERVICES USE

### Gratiot County, MI

#### INFECTIOUS DISEASE CASES<sup>1</sup>

These diseases respond to public health control efforts. The expected number is based on the occurrence of cases among peer counties.

	Reported Cases	Expected Cases
AIDS	rna	rna
Tuberculosis	rna	rna
🍏 Haemophilus influenzae B	0	0
🍏 Hepatitis A	3	2
🍏 Hepatitis B	0	2
🍏 Measles	0	0
🍏 Pertussis	6	13
🍏 Congenital Rubella Syndrome	0	0
🍏 Syphilis	0	0

🍏 Indicates a status favorable to peers.

🔍 Indicates a status less than favorable.

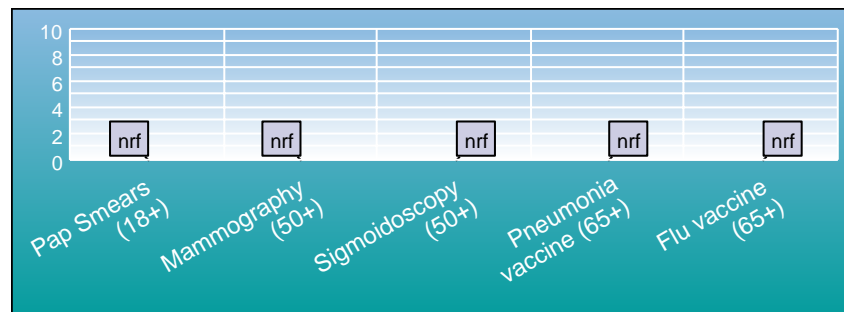
rna The release of data for all counties has not been authorized

nda No data available.

#### CHILD PREVENTIVE SERVICES USE

Indicators such as immunizations, dental caries, and the prevalence of lead screening are not collected at the national level and must be obtained locally.

#### ADULT PREVENTIVE SERVICES USE (%)<sup>2</sup>



nrf No report, survey sample size fewer than 50.

<sup>1</sup> CDC. National Notifiable Diseases Surveillance System, 2003-2007.

<sup>2</sup> CDC. Behavioral Risk Factor Surveillance System, 2000-2006.

## PEER COUNTIES

A distinctive aspect of this report is the ability to compare a county with its peers, those counties similar in population composition and selected demographics. Strata, or peer group size averages 36 and ranges from 15 to 62 counties. There are a total of 88 strata. Listed below are the 36 peer counties in stratum number 29. Due to the population size of counties within this stratum, data on vital statistics (e.g. births and deaths) and nationally notifiable diseases were aggregated across the most recent 5 year time period (2001-2005) in order to ensure stable estimates.

#### Alabama

Autauga County

#### Arkansas

Lonoke County

#### California

San Benito County

#### Georgia

Barrow County

Camden County

Effingham County

Gordon County

Murray County

#### Indiana

Miami County

Washington County

#### Kansas

Finney County

Ford County

Lyon County

#### Kentucky

Meade County

Nelson County

#### Louisiana

St. Charles Parish

#### Michigan

Branch County

Hillsdale County

Newaygo County

#### Missouri

Lincoln County

Newton County

#### New York

Cortland County

Lewis County

Orleans County

Wyoming County

#### North Carolina

Lee County

#### Ohio

Brown County

Carroll County

Holmes County

#### Pennsylvania

Wyoming County

#### Tennessee

Dickson County

#### Texas

Hardin County

Wise County

#### Vermont

Franklin County

Orange County

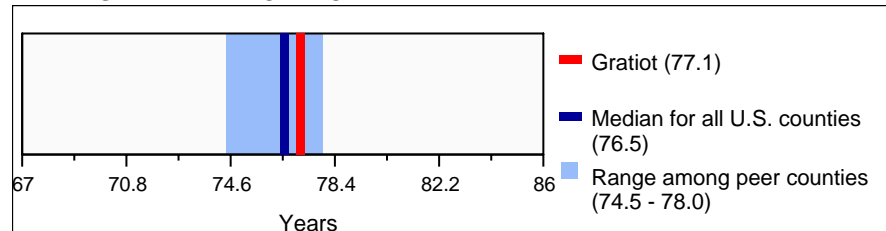
#### Wisconsin

Monroe County

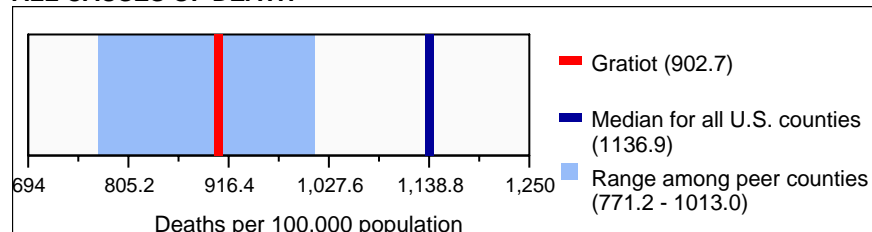
## SUMMARY MEASURES OF HEALTH

### Gratiot County, MI

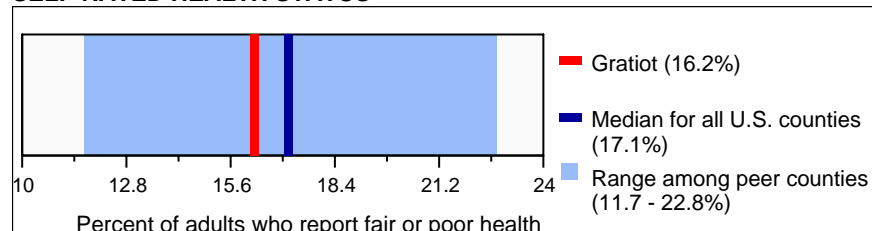
#### AVERAGE LIFE EXPECTANCY<sup>1</sup>



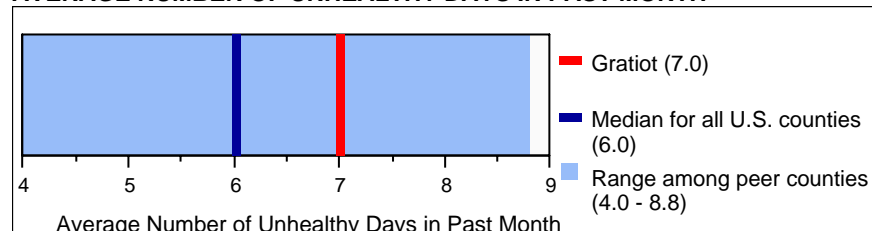
#### ALL CAUSES OF DEATH<sup>2</sup>



#### SELF-RATED HEALTH STATUS<sup>3</sup>



#### AVERAGE NUMBER OF UNHEALTHY DAYS IN PAST MONTH<sup>3</sup>



nrf No report, survey sample size fewer than 50.

nda No data available.

<sup>1</sup> Murray et al., PLoS Medicine 2006 Vol. 3, No. 9, e260 doi:10.1371/journal.pmed.0030260.

<sup>2</sup> NCHS. Vital Statistics Reporting System, 2001-2005.

<sup>3</sup> CDC. Behavioral Risk Factor Surveillance System, 2000-2006.

## VULNERABLE POPULATIONS

### Gratiot County, MI

Vulnerable populations may face unique health risks and barriers to care, requiring enhanced services and targeted strategies for outreach and case management.

#### Vulnerable Populations Include People Who<sup>1</sup>

Have no high school diploma (among adults age 25 and older)	4,714
Are unemployed	1,861
Are severely work disabled	966
Have major depression	2,709
Are recent drug users (within past month)	3,408

nda No data available.

<sup>1</sup> The most current estimates of prevalence, obtained from various sources (see the Data Sources, Definitions, and Notes for details), were applied to 2008 mid-year county population figures.

## ENVIRONMENTAL HEALTH

### Gratiot County, MI

#### INFECTIOUS DISEASES<sup>1</sup>

Cases	Reported	Expected
🍎 E.coli	1	2
🍎 Salmonella	20	34
🍎 Shigella	2	11

TOXIC CHEMICALS RELEASED ANNUALLY<sup>2</sup>: 11,476 pounds

#### NATIONAL AIR QUALITY STANDARDS MET BY COUNTY<sup>3</sup>

Carbon Monoxide	Nitrogen Dioxide	Sulfur Dioxide	Ozone	Particulate Matter	Lead
Yes	Yes	Yes	Yes	Yes	Yes

🍎 Indicates a status favorable to peers.

🔍 Indicates a status less than favorable.

nda No data available.

<sup>1</sup> CDC. National Notifiable Diseases Surveillance System, 2003-2007.



<sup>2</sup> EPA. Toxic Release Inventory (TRI) Explorer Report, 2008.

<sup>3</sup> EPA. AIRSDATA, 2008.



## RELATIVE HEALTH IMPORTANCE

### Gratiot County, MI

Your Health Status Compared to Peers	
UNFAVORABLE	FAVORABLE
 <ul style="list-style-type: none"> <li>Breast Cancer (Female)</li> <li>Colon Cancer</li> <li>Coronary Heart Disease</li> <li>Stroke</li> </ul>	<ul style="list-style-type: none"> <li>Motor Vehicle Injuries</li> </ul>
<ul style="list-style-type: none"> <li>Very Low Birth Wt. (&lt;1500 g)</li> <li>Births to Unmarried Women</li> </ul>	 <ul style="list-style-type: none"> <li>Low Birth Wt. (&lt;2500 g)</li> <li>Premature Births (&lt;37 weeks)</li> <li>Births to Women under 18</li> <li>Births to Women age 40-54</li> <li>No Care in First Trimester</li> <li>Infant Mortality</li> <li>White non Hispanic Infant Mortality</li> <li>Neonatal Infant Mortality</li> <li>Post-neonatal Infant Mortality</li> <li>Lung Cancer</li> <li>Suicide</li> <li>Unintentional Injury</li> </ul>

The Relative Health Importance table creates four categories of relative concern by simply comparing a county to its peers and to the U.S.

A county's indicators in the upper left-hand box (🔍) are higher than the U.S. and its peers and may warrant more attention. Conversely, indicators in the lower right-hand box (🍏) of the table compare favorably to both peers and the U.S. The other boxes represent intermediate levels of health where a county's rate is higher than either its peers or the U.S., but not both.

Source: [Measures of Birth and Death tables, pages 6 - 7.](#)

## NATIONAL LEADING CAUSES OF DEATH<sup>1</sup>

### Gratiot County, MI

	White	Black	Other	Hispanic
<b>Under Age 1</b>				
Complications of Pregnancy/Birth	nrf	nrf	nrf	nrf
Birth Defects	nrf	nrf	nrf	nrf
<b>Ages 1-14</b>				
Injuries	nrf	nrf	nrf	nrf
Cancer	nrf	nrf	nrf	nrf
Homicide	nrf	nrf	nrf	nrf
<b>Ages 15-24</b>				
Injuries	nrf	nrf	nrf	nrf
Homicide	nrf	nrf	nrf	nrf
Suicide	nrf	nrf	nrf	nrf
Cancer	nrf	nrf	nrf	nrf
<b>Ages 25-44</b>				
Injuries	23%	nrf	nrf	nrf
Cancer	24%	nrf	nrf	nrf
Heart Disease	20%	nrf	nrf	nrf
Suicide	nrf	nrf	nrf	nrf
HIV/AIDS	nrf	nrf	nrf	nrf
Homicide	nrf	nrf	nrf	nrf
<b>Ages 45-64</b>				
Cancer	36%	nrf	nrf	nrf
Heart Disease	27%	nrf	nrf	nrf
<b>Ages 65+</b>				
Heart Disease	35%	nrf	nrf	27%
Cancer	17%	nrf	nrf	15%

nrf No report, fewer than 20 deaths in race/ethnicity and age group or less than 10% of the deaths.

nda No data available.

Local data are presented for the Nation's top leading causes of death in each age group. Columns, within age categories, do not total 100% because all causes of death are not listed.

The most complete ethnicity data available are reported.

<sup>1</sup> NCHS. Vital Statistics Reporting System, 2001-2005.

# MEASURES OF BIRTH AND DEATH<sup>1</sup>

## Gratiot County, MI

County Percent / C.I.			Peer County Range		Birth Measures	U.S. Percent 2005	Healthy People 2010 Target
7.0	(6.0 , 8.0)	🍏	6.1 - 8.3		Low Birth Wt. (<2500 g)	8.2	5.0
1.3	(0.9 , 1.8)	🍏	0.9 - 1.6		Very Low Birth Wt. (<1500 g)	1.5	0.9
10.8	(9.6 , 12.1)	🍏	9.1 - 14.0		Premature Births (<37 weeks)	12.7	7.6
3.0	(2.3 , 3.7)	🍏	1.8 - 5.5		Births to Women under 18	3.4	No objective
1.3	(0.8 , 1.7)	🍏	1.2 - 2.8		Births to Women age 40-54	2.7	No objective
36.8	(34.8 , 38.7)	🍏	26.9 - 41.8		Births to Unmarried Women	36.9	No objective
13.5	(12.1 , 14.8)	🍏	12.0 - 25.2		No Care in First Trimester <sup>2</sup>	16.1	10.0

County Rate / C.I.			Peer County Range		Infant Mortality <sup>3</sup>	U.S. Rate 2005	Healthy People 2010 Target
5.3	(2.8 , 9.1)	🍏	3.7 - 9.2		Infant Mortality	6.9	4.5
4.8	(2.2 , 9.2)	🍏	3.6 - 9.4		White non Hispanic Infant Mortality	5.8	4.5
nrf	(nrf , nrf)		0.0 - 58.8		Black non Hispanic Infant Mortality	13.6	4.5
nrf	(nrf , nrf)		0.0 - 13.7		Hispanic Infant Mortality	5.6	4.5
3.7	(1.7 , 7.0)	🍏	2.2 - 6.0		Neonatal Infant Mortality	4.5	2.9
1.6	(0.4 , 4.2)	🍏	0.7 - 4.1		Post-neonatal Infant Mortality	2.3	1.2

County Rate / C.I.			Peer County Range		Death Measures <sup>4</sup>	U.S. Rate 2005	Healthy People 2010 Target
27.5	(18.6 , 39.3)	🍏	14.1 - 31.1		Breast Cancer (Female)	24.1	21.3
28.1	(21.6 , 35.9)	🍏	14.7 - 26.3		Colon Cancer	17.5	13.7
235.2	(215.9 , 254.6)	🍏	131.9 - 219.5		Coronary Heart Disease	154.0	162.0
nrf	(nrf , nrf)		0.3 - 6.0		Homicide	6.1	2.8
38.0	(30.3 , 46.9)	🍏	40.3 - 74.6		Lung Cancer	52.6	43.3
19.9	(14.4 , 26.7)	🍏	13.3 - 32.3		Motor Vehicle Injuries	14.6	8.0
85.6	(74.2 , 96.9)	🍏	46.0 - 66.4		Stroke	47.0	50.0
5.1	(2.5 , 9.1)	🍏	6.0 - 15.7		Suicide	10.9	4.8
19.5	(14.1 , 26.2)	🍏	16.6 - 32.9		Unintentional Injury	39.1	17.1

The total number of births during this time period was 2,440 and the total number of deaths was 2,210.

🍏 Indicates a status favorable to peers.

🍏 Indicates a status less than favorable.

nrf No report, fewer than 500 births and 5 events (birth measures and infant mortality) or fewer than 10 events (death measures) occurred during the specified time period.

nda No data available.

cdna Comparable data not available.

<sup>1</sup> NCHS. Vital Statistics Reporting System, 2001-2005.

<sup>2</sup> Include 37 states, New York City and DC (see the Data Sources, Definitions, and Notes for details).

<sup>3</sup> Infant mortality: deaths per 1000 live births (Neonatal: <28 days; post-neonatal: day 28 to under one year).

<sup>4</sup> Rates are age-adjusted to the year 2000 standard; per 100,000 population.